



## **IUD COMPLICATIONS**

<b>DEFINITION</b>	IUD complications include but are not limited to perforation, missing strings and/or string problems, delayed menses, complicated pregnancy, cramping and pelvic pain, abnormal bleeding, expulsion, and symptomatic actinomycosis noted on Pap screening. Complications may be treatable or may require removal of device.
<b>SUBJECTIVE</b>	May include: <ol style="list-style-type: none"><li>1. No symptoms.</li><li>2. LMP.</li><li>3. Medical, sexual, and contraceptive use history, initial or update, as appropriate.</li><li>4. History of any method related problems, including but not limited to:<ol style="list-style-type: none"><li>a. intense cramping and/or pelvic pain.</li><li>b. string problems.</li><li>c. abnormal vaginal bleeding or discharge.</li><li>d. concern of IUD expulsion.</li><li>e. symptoms of anemia (pallor, fatigue, palpitations).</li></ol></li></ol>
<b>OBJECTIVE</b>	May include: <ol style="list-style-type: none"><li>1. Visualization of cervix to note<ol style="list-style-type: none"><li>a. presence or absence of bleeding/discharge.</li><li>b. presence or absence of strings.</li><li>c. color and number of strings and length of strings, if present.</li></ol></li><li>2. Pelvic examination to note<ol style="list-style-type: none"><li>a. palpation of os for IUD presence.</li><li>b. uterine sizing if suspected pregnancy.</li></ol></li></ol> Must exclude: <ol style="list-style-type: none"><li>1. adnexal tenderness or masses (suspect ectopic pregnancy). PID</li></ol>
<b>LABORATORY</b>	May include: <ol style="list-style-type: none"><li>1. Sensitive urine pregnancy test.</li><li>2. Vaginitis/cervicitis testing as indicated.</li><li>3. Hemoglobin.</li><li>4. Pap result reporting actinomycosis presence with evidence of infection.</li></ol>
<b>ASSESSMENT</b>	Complications related to IUD use.

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**PLAN**

Treatment may be provided according to identified problems.

1. Missing Strings - Non Pregnant. If the IUD string(s) are missing, it may mean the client has expelled the IUD, the string(s) have wrapped around the IUD, has ascended into the uterine cavity, or that the IUD has perforated the uterus. Foreign countries may completely cut IUD strings at time of insertion.
    - a. Endocervical string(s) may be extracted by rotating a cyto brush in the canal. Withdraw strings, if able. Note length. IUD may remain in place if client desires or remove IUD per protocol if client desires.
    - b. Examine cervix with uterine sound, sterile Q-tip, revisualize canal through endocervical speculum. If IUD in endocervix remove and offer to replace.
    - c. If expulsion suspected obtain ultrasound or x-ray to determine IUD absence or presence and location.
    - d. If IUD is absent, provide ECPs if appropriate, and/or another form of contraception.
    - e. If strings missing, but IUD present in uterus and client desires removal, refer to MD.
  2. Missing strings - Pregnant. If the IUD string(s) are missing, it may mean the client has expelled the IUD, the string(s) have wrapped around the IUD, ascended into the uterine cavity, or that the IUD has perforated the uterus. Management differs depending upon client's pregnancy status and preference. An IUD is not known to cause fetal malformations, but increases the risk for ectopic pregnancy, preterm delivery or miscarriage, including septic infected miscarriage. Must rule out ectopic pregnancy.
    - a. Discuss pregnancy options and refer for appropriate care.
    - b. If client refuses IUD removal, the following should be documented in her chart: Client informed of increased risk of spontaneous abortion, premature labor, and septic infection because of an IUD. Client chooses to not have IUD removed and accepts the increased risks that have been explained to her. Refer to MD.
  3. Delayed Menses - Non Pregnant. An IUD user who complains of delayed menses (no vaginal bleeding at the expected interval) may not be pregnant. Delayed or absent menses common with Mirena.
    - a. Check for IUD strings.
    - b. If LMP less than 2 months ago or more than her usual interval, reassure her and urge her to return in 2 weeks for repeat pregnancy test.
  4. Delayed Menses - Pregnant. An IUD user who complains of delayed menses (no vaginal bleeding at the expected interval) may be pregnant. If an IUD user becomes pregnant, she is at higher risk of having ectopic pregnancy, preterm delivery, miscarriage, including a septic infection miscarriage. Management of such clients depends upon pregnancy location, gestational age, and visibility of string(s) and preference.
    - a. Discuss pregnancy options, advising it is best to remove the IUD, and refer for appropriate care and IUD removal.
    - b. If client refuses IUD removal, the following should be documented in her chart: Client has been informed of increased risk of spontaneous abortion, premature labor, and septic infection because of an IUD. Client chooses not to have IUD removed and accepts the increased risks that have been explained to her. Refer to MD.
  5. Cramping and pelvic pain. Women with IUDs who experience cramping and pelvic pain should be evaluated to rule out perforation, pregnancy, PID, threatened or partial expulsion, dislodgement or expulsion.
    - a. Acute uterine perforation, either by the uterine sound or IUD, during insertion may result in a medical emergency. Non-acute uterine perforation may occur at any time and is most frequently detected by imaging studies in clients with missing IUD strings. If perforation has been confirmed or is suspected, refer for evaluation and removal.
    - b. Any client with ectopic pregnancy must be referred for STAT MD evaluation.
    - c. Any client with suspected or symptomatic PID, refer to PID protocol (RD 9). See infection with IUD also.
    - d. Offer NSAIDS with menses or just before menses every month to reduce cramping.
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<b>PLAN</b>	<p>6. Abnormal Bleeding or IUD Expulsion - Non-Pregnant. Women with IUDs often experience a moderate increase in regular menstrual bleeding, but also can suffer acute bleeding from IUD complications. Partial IUD expulsion often presents with acute vaginal bleeding. The client needs to be evaluated to exclude other sources of bleeding. Decision about management depends upon the client's clinical status and her preferences.</p> <ul style="list-style-type: none"> <li>a. If IUD expelling: <ul style="list-style-type: none"> <li>1) Remove IUD.</li> <li>2) Confirm if pregnant or not. If not pregnant, may re-insert</li> <li>3) If complete expulsion suspected and client does not know if IUD came out or not, confirm by abdominal x-ray or ultrasound.</li> </ul> </li> <li>b. For other abnormal bleeding or anemia: <ul style="list-style-type: none"> <li>1) For post-coital bleeding: check for cervical infection or polyps.</li> <li>2) For spotting/hypermenorrhea: <ul style="list-style-type: none"> <li>a) Offer NSAIDS to start at onset of each menses to reduce menstrual blood loss (Ibuprofen, 400-800 mg q 4-6 hrs. PO x 3 days).</li> <li>b) Instruct client to keep menstrual calendar for 2 cycles.</li> <li>c) Consider rule out infection and/or pregnancy.</li> </ul> </li> </ul> </li> <li>c. Treat anemia per protocol.</li> <li>d. For clients not satisfied with method or not responding to above plan, offer to remove the IUD (see IUD Removal Protocol).</li> </ul> <p>7. Infection with IUD use:</p> <ul style="list-style-type: none"> <li>a. BV or candidiasis: treat routinely.</li> <li>b. Trichomoniasis: treat and reassess IUD candidacy.</li> <li>c. Cervicitis or PID: IUD removal not necessary unless no improvement after antibiotic treatment. However, if IUD determined to be removed, give first dose of antibiotics to achieve adequate serum levels before removing IUD.</li> </ul> <p>8. Actinomycosis - With IUD. Culture of asymptomatic women without an IUD and of women with an IUD both find that 3-4% are positive for actinomyces. Often suggested by pap smear report of "Actinomycosis – like organisms". True upper tract infection with this organism is very serious and requires at least prolonged IV antibiotic therapy with penicillin. Examine patient for any signs of PID. If patient has no clinical evidence of upper tract involvement 3 major options are available.</p> <ul style="list-style-type: none"> <li>a. Conservative. Annual pap smears only. Advise patient to return prn or if she develops PID symptoms OR Advise of findings and significance.</li> <li>b. Treat with antibiotic (penicillin G or a tetracycline) for one month and repeat pap smear OR</li> <li>c. If symptomatic remove IUD, Send for anaerobic culture and refer to physician for further evaluation.</li> </ul>
<b>PLAN</b>	<p>9. Partner can feel IUD strings during intercourse.</p> <p>Explain this can happen if strings are cut too short.</p> <ul style="list-style-type: none"> <li>a. Can cut strings shorter so they are not coming out of cervical canal.</li> <li>b. If the woman wants to be able to check IUD strings, can remove and insert a new one, cutting the strings to 3 cm outside of the cervix.</li> <li>c. Too long: need to check for partial expulsion. If in place, then trim.</li> </ul>
<b>CLIENT EDUCATION</b>	<ul style="list-style-type: none"> <li>1. Reinforce IUD education if client chooses to continue method or plans insertion of another.</li> <li>2. Review safer sex education, if appropriate.</li> </ul>

	3. Advise of pertinent client information regarding antibiotic use. 4. Counsel client on choosing another method of birth control if IUD is removed and client does not desire pregnancy. (Refer to chosen method protocol.) 5. Recommend that client RTC annually and PRN for problems.
<b>CONSULT / REFER TO PHYSICIAN</b>	1. Any client with signs and symptoms of perforation. 2. Suspected ectopic pregnancy (STAT referral). 3. Pregnant clients with IUD in place. 4. Client with persistent bleeding not resolved after treatment. 5. Any client who, by protocol, should have IUD removed but refuses. 6. Any difficult IUD removal. 7. Any client needing ultrasound or abdominal flat plate.

### IUD WARNING SIGNS

- P • Period late (pregnancy), abnormal spotting or bleeding
- A • Abdominal pain, pain with intercourse or urination
- I • Infection exposure (any STD), abnormal discharge
- N • Not feeling well, fever, chills, nausea/vomiting
- S • String missing, shorter or longer

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#### References:

1. Hatcher, R.A., Trussell, J, Nelson, A. L., et al. ., (2011). Contraceptive Technology (20<sup>th</sup> Revised ed.). New York: Irvington Publishers, Inc. pp. 179-182.